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(Caption of Case)) BEFORE THE) PUBLIC SERVICE COMMISSION) OF SOUTH CAROLINA				
In the Matter	of)	Or SOC	•			
Application of Duke Energy Carolinas, LLC for Approval of Decision to Incur Nuclear Generation Pre-Construction Costs			COVER SHEET 1				
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Submitted by: Robert Guild			SC Bar Number	C Bar Number: 2358			
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ROBERT GUILD

Attorney, at Law

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March 3, 2008

Mr. Charles Terreni
Chief Clerk
Public Service Commission of South Carolina
Synergy business Park, Saluda Building
101 Executive Center Drive
Columbia, SC 29210

Re:

Application of Duke Energy Carolinas, LLC for Approval of Decision to Incur

Nuclear Generation Pre-Construction Costs

Docket No. 2007-440-E

Dear Mr. Terreni:

Enclosed please find for filing and consideration a Petition to Intervene in this proceeding on behalf of Friends of the Earth, together with Certificate of Service reflecting service upon the parties of record.

With kind regards I am

Robert Guild

Encl.s

BEFORE

THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

DOCKET NO. 2007-440-E



In the Matter of)	
Application of Duke Energy Carolinas, LLC for Approval of Decision to Incur Nuclear Generation Pre-Construction Costs))))	PETITION TO INTERVENE BY FRIENDS OF THE EARTH

Friends of the Earth, on behalf of its members who will be adversely affected by the approval of the subject Application, hereby petitions the Commission pursuant to R. 103-825 of the Commission's Regulations to intervene and be made a party of record in the above-referenced proceeding.

Duke's unnecessary venture into a speculative and risky nuclear construction project, the proposed William States Lee, III Nuclear Station to be located in Cherokee County, South Carolina, is imprudent and will serve to increase electricity rates, reduce electric system reliability, and reduce Duke stockholder earnings if preconstruction costs are charged to ratepayers, whether or not they ever benefit from any electricity production from the proposed nuclear plants. Friends of the Earth advocates the pursuit of less risky and less costly alternatives including conservation and efficiency over the unjustified pursuit of costly, dangerous, and unreliable new reactors which create yet more nuclear waste for which there is no safe disposal option. Ratepayers,

stockholders and neighboring residents in North Carolina are challenging Duke's preconstruction cost approval application for the proposed Lee Nuclear Station in a pending proceeding before the North Carolina Utilities Commission, Docket No. E-7, Sub 819.

In support of this Petition, Friends of the Earth, ("FoE") would respectfully show:

1. FoE is a non-profit environmental advocacy organization with members in all the 50 states including South Carolina and with its headquarters in Washington, DC. FoE is affiliated with Friends of the Earth International, the world's largest environmental advocacy network with member organizations in 70 countries. FoE has worked for over 38 years to promote a healthy and just world and has been a leading advocate for safe and sustainable energy. It has worked to show how it is possible to shift the U.S. and global economies to a cleaner energy basis, using the latest in efficiency improvements, along with renewable energy sources such as wind, geothermal, and solar power. Members of FoE are ratepayers and stockholders of Duke Power. Members of FoE live, work, travel, recreate, use and enjoy natural resources in the vicinity of the proposed William States Lee, III Nuclear Station. They breathe the air, use and drink the water, eat food grown in the vicinity of the proposed project. FoE's members would be harmed by the approval of the subject Application because of unwarranted increases in their electric rates, reduced reliability of their electric service, reduced earnings on their investments in Duke stock, risk to their health and safety from routine and accidental releases of radiation, and harm to their use and enjoyment of natural resources which will be adversely affected by the approval of this Application, the subsequent costs associated with this project, and the construction and

operation of the proposed William States Lee, III Nuclear Station.

- 2. Pursuant to S.C. Code Ann. Section 58-3'3-225, the Application of Duke Energy Carolinas, LLC for Approval of Decision to Incur Nuclear Generation Pre-Construction Costs should be denied where the Applicant has failed to establish that the decision to incur preconstruction costs related to the potential nuclear plant is prudent considering the information available to the utility at the time and considering the other alternatives available to the utility for supplying its generation needs. Further, the Application should be denied where the Applicant has failed to fully and accurately describe and establish the plant being considered, including the annual capacity factor of the proposed plant; the need for the generation capacity represented by the potential plant; and the reasonableness and prudence of the potential fuel sources and potential generation types represented by the proposed plant.
- 3. By this Application, Duke is seeking a veritable blank check from the Commission to incur so-called preconstruction costs without limitation. Duke's request for approval of on-going preconstruction costs presents only an estimate of costs to be incurred in North Carolina and South Carolina. Duke admits that the \$230 million in costs anticipated by December 31, 2009, is simply an estimate, with no maximum presented. Additionally, Duke has chosen to incur preconstruction costs, at its own risk without Commission approval, prior to its Application of December 7, 2007. Duke must be required to make a detailed public accounting of what costs it expects to incur; and what costs it seeks approval to incur by this Application.
- 4. Costs of purchasing right-of-way and of ordering long-lead procurement items are not itemized in Duke's Application, are not within the allowed definition of

preconstruction costs, and should not be approved. In its filing Duke included a list of possible high-cost items which might be purchased in advance, including such things as the Reactor Pressure Vessel, Steam Generators and the Containment Vessel itself. Duke admits that it "does not currently know with precision what items would require long-lead procurement decisions," yet it attempts to leave open advance purchase of equipment in an effort to place the cost and risk on ratepayers via unjustified preconstruction costs. Duke has provided no evidence whatsoever from Westinghouse, the AP1000 vendor, about the need for long-lead procurement purchases, or their projected costs.

- 5. A recent independent study suggest that the cost of a new nuclear power plant in North America rose 27% in the past 12 months and 130% since 2000. Thus, since Duke's announcement in 2005 to pursue new reactors at the Lee site, the economics of new nuclear power have been steadily worsening, thus necessitating particularly thorough scrutiny by the Commission of the prudence of the Duke Application.
- 6. While Duke claims that its decision to continue planning for new reactors at the Lee site is prudent, contrary evidence on a state and national level indicates otherwise. Decisions by other utilities to pursue new reactors are in a state of flux. On January 29, 2008, MidAmerican Energy Holdings Company, a subsidiary of Warren Buffett's Berkshire Hathaway Inc., decided to cancel plans for new nuclear reactors in Idaho, stating that "the present economics of building the next generation of nuclear power plants are not in our customers' best interests." Further, on February 13, 2008, the US Nuclear Regulatory Commission issued an order withdrawing the hearing notice

of the Combined Operating License (COL) for the South Texas Project Units 3 and 4, only two months after the NRC had accepted the COL for docketing. In South Carolina, South Carolina Electric and Gas (SCE&G), which had expressed interest in new AP 1000 nuclear units, has decided to delay any decision to move forward while it considers other options. SCE&G acknowledged that its credit rating dipped when it simply expressed interest in new reactors, causing the company to carefully consider its next energy choices. While the US Nuclear Regulatory Commission has accepted Duke's fling for a Combined Operating License (COL), this does not imply that Duke has actually placed an order for a reactor. Duke admits in the preconstruction filing that "no final decision has been made to construct the facility," leaving open the possibility at any point that Duke could withdraw and leave rate payers footing the bill for incurred unnecessary costs.

7. Duke's own record of planning for new nuclear reactors is poor. In Duke's filing it avoids placing a cost on the new units, but does affirm the disturbing statement that pursuing the new reactors is the "largest single capital project in the history of Duke Energy Carolinas." Duke's record in planning for nuclear projects and forecasting financial impacts of those projects is spotty at best, as evidenced by the cancellation of two planned projects, Cherokee and Perkins, in the 1980s, with a total of six reactors canceled, with reported costs of hundreds of millions of dollars imprudently invested, and borne by ratepayers. It is clear from published reports and statements from the utilities themselves that costs for new reactors are increasing dramatically. It may well be that ever-increasing costs could lead to another financial melt-down of utilities pursuing new nuclear reactors. As Forbes magazine said in 1985, about the last crisis

caused by investing in nuclear power: "The failure of the U.S. nuclear power program ranks as the largest managerial disaster in business history, a disaster on a monumental scale." It is incumbent upon this Commission to prevent a repeat of this managerial failure and the saddling of rate-payers with a massive debt for plant investment not used and useful in providing needed utility service.

- 8. While costs of reactor designs never built before are uncertain at best, it is clear that due to a host of issues, including increases in material and equipment costs, cost estimates are rapidly rising for the Westinghouse AP1000, proposed here. In a public filing with before the Florida Public Service Commission on October 16, 2007, Florida Power & Light identified costs for new AP1000 reactors to be from \$5.5 billion to \$8.1 billion, indicating precipitous increases and suggesting more increases to come. Duke must be required to provide such costs estimates to the Commission, also available to the public, in support of its preconstruction cost request. Given that the AP1000 design has never been built or used in service, it is certain that design changes and problems faced during construction and early operations will pose unknown cost increases. Thus, Duke has chosen a course which imprudently imposes additional financial risks to its ratepayers.
- 9. Wall Street has proven unwilling to finance new nuclear reactors, underscoring the financial risks involved and forcing utilities to seek government subsidies. In a March 2007 Congressional Research Service report on nuclear power it is stated that, "(B)ecause it is generally believed that Wall Street continues to view new commercial reactors as financially risky, the availability of federal loan guarantees could be a key element in attracting funding for such projects and reducing financing costs."

In the Fiscal Year 2008 omnibus spending bill approved by Congress, nuclear utilities secured loan guarantees totaling \$18.5 billion. But it appears that this guarantee has many strings attached and is for only one year. Further, the US Department of Energy has not yet set up an office to administer the program. Even if new units come in at the very conservative cost of \$5.5 billion, then the loan guarantees would only cover a few reactors. It is unclear if Duke will seek these loan guarantees and it is unknown what other subsidies it is seeking or would be available, matters which must be publicly clarified before placing rate payers at great risk by approval of these preconstruction costs.

- viable resource with no carbon dioxide (CO2) or other greenhouse emissions." When looking at nuclear power, just as with any other energy resource, the energy inputs all along the production cycle must be analyzed. In the case of the "nuclear fuel cycle," there are large inputs of fossil fuel at every step of the process, from mining and milling of uranium, to energy-intensive enrichment of uranium, to construction and management for thousands of years of the deadly waste produced. It is disingenuous at best to claim that nuclear power does not contribute to global warming. Moreover, investment of vast sums of money in nuclear power leaves less money to be invested in conservation, efficiency and alternative energy sources; thus, actually exacerbating the global warming problem.
- 11. Conservation and efficiency offer great hope for more energy return on investment, yet Duke states in the filing that it is considering spending only "\$50 million on future conservation and demand response programs each year." Compared to even

preconstruction costs being sought, this is a small amount of money and is negligible in the overall scheme of Duke's utility plant investment. Although the promise of conservation and efficiency is large, Duke appears more interested in investing in new reactors at more than \$5 billion each than in vigorously pursuing least-cost options that would save more energy than any new reactors would produce. While Duke says it will double "current system and energy efficiency demand-side management MW capacity" such efforts will pale in comparison to investing in multi-billion dollar reactors and reflect an imprudent capacity expansion decision.

- 12. While Duke claims that the AP1000 has a design to "enhance plant safety and operations," the same type of risks of nuclear accident plague this and other models of reactors. Although a serious accident such as what happened at Chernobyl or an act of nuclear terrorism is considered of low probability, such events are clearly high consequence events that could break any company, while causing extreme damage to public health and the environment and saddling rate payers with a massive clean-up, environmental impairment, personal liability and reconstruction bill. Especially given that the AP1000 reactor design has never been built and tested there are likely to be unforeseen problems that could end up making these reactors even more risky. Efforts to reduce costs could also lead to cutting corners during construction, as we witnessed during reactor construction in the 1980s.
- 13. The nuclear waste problem with the AP1000 will be essentially the same as for current reactors. As there are no viable plans for long-term storage of waste, it is imprudent to move ahead with new reactors when we have not been able to address the waste problem we are now facing. As with currently operating reactors, high level

nuclear waste generated at the Lee Nuclear Station would simply be accumulated at the reactor site on the Broad River in Cherokee County. In South Carolina, we face an additional risk from more additional high-level waste as the Department of Energy is proposing a plan to carry spent fuel to an interim site for reprocessing, a dirty and dangerous process which is being considered for the Savannah River Site.

14. The AP1000 reactors proposed for the Lee Nuclear Station would withdraw and use tens of millions of gallons of water per day from the Broad River, which presents serious demands on a limited water resource; and which could have serious downstream effects in the likely case the current drought cycle continues. Upstream from the Lee site, Duke proposes to withdraw water for its proposed Cliffside coal plant. Downstream from the Lee site, the V.C. Summer Nuclear Station currently withdraws water from the Broad River. Recent drought conditions have already threatened reduced operations and shut-downs of nuclear plants due to low water levels. Concern about water consumption will only grow once Duke produces an environmental statement with details of water use requirements from a system under growing demands. As this issue alone could cause considerable scrutiny of the project, the Commission should withhold authorizing preconstruction expenses until Duke has demonstrated detailed environmental impacts, together with cost estimates for all phases of planning, reactor purchase, and construction.

WHEREFORE: For the foregoing reasons, Friends of the Earth, on behalf of its members who will be adversely affected by the approval of the subject Application, hereby petitions the Commission pursuant to R. 103-825 of the Commission's Regulations to intervene and be made a party of record in the above-referenced

proceeding. Pursuant to S.C. Code Ann. Section 58-33-225, FoE respectfully urges the Commission to deny the Application of Duke Energy Carolinas, LLC for Approval of Decision to Incur Nuclear Generation Pre-Construction Costs.

Robert Guild

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ATTORNEY FOR PETITIONER

FRIENDS OF THE EARTH

March 3, 2008

BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA DOCKET NO. 2007-440-E

In the Matter of)	
Application of Duke Energy Carolinas, LLC)	Certificate of Service
for Approval of Decision to Incur Nuclear)	
Generation Pre-Construction Costs)	
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I hereby certify that on this date I served the above Petition to Intervene by placing copies of same in the United States Mail, first-class postage prepaid, addressed to:

Kodwo Ghartey-Tagoe

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March 3, 2008